



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,932	06/06/2000	Xin Qiu	18926-002310US	8876

20350 7590 03/15/2004

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

SON, LINH L D

ART UNIT	PAPER NUMBER
----------	--------------

2135

5

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,932

Applicant(s)

QIU ET AL.

Examiner

Linh LD Son

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
2. A person shall be entitled to a patent unless –
3. (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
4. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen (US-5638448).
5. As per claim 1, Nguyen discloses “Network with Secure Communications Sessions” invention which includes a method of providing data, said method comprising: storing a first set of encryption data associated with a first data stream; encrypting a first data stream having said first-level-of-encryption (Col 10 lines 7-15); storing a second set of encryption data associated with a second data stream; encrypting the second data stream having a second-level-of-encryption (Col 10 lines 16-22), said first-level-of-encryption

being different from said second-level-of-encryption (Col 10 lines 7-25); and utilizing a common memory (Col 12 lines 20-25, and Figure 12, 1206) to encrypt said first data stream at said first level-of-encryption and to encrypt said second data stream at said second-level-of encryption. The apparatus use in Nguyen's invention is a computer (Col 1 lines 15-20).

6. As per claim 2, Nguyen discloses the method as described in claim 1 wherein said first set of encryption data comprises at least one encryption key (Col 20 lines 30-35).
7. As per claim 3, Nguyen discloses the method as described in claim 1 and further comprising transmitting said first and second data streams to a set-top box (Col 1 lines 15-20).
8. As per claim 4, Nguyen discloses the method as described in claim 3 and further comprising storing a plurality of decryption algorithms at said set-top box (Col 19 lines 43-53).
9. As per claim 5, Nguyen discloses the method as described in claim 1 and further comprising: transmitting a first number of services in said first data stream; and transmitting a second number of services in said second data

stream, said second number of services being different from said first number of services (See abstract).

10. As per claim 6, Nguyen discloses the method as described in claim 1 wherein said first-level of encryption utilizes the Data Encryption Standard (Col 10 lines 7-25) and wherein said second-level-of encryption utilizes an encryption algorithm different from said Data Encryption Standard. Col 20 lines 58-67 implicitly disclose a different algorithm can be used.
11. As per claim 7, Nguyen discloses the method as described in claim 1 and further comprising: decrypting said first data stream at said set-top box; and decrypting said second data stream at said set-top box (Col 11 lines 37-47).
12. As per claim 10, Nguyen discloses a cryptography circuit comprising: a memory operable to store a first set of encryption data for a data stream; a reconfiguration circuit operable to reconfigure said memory such that said memory stores a second set of encryption data different from said first set of encryption data (Col 11 lines 38-46 and Figures 11 and 12).
13. As per claim 12, Nguyen discloses the cryptography circuit as described in claim 10 and further comprising a memory to store a plurality of encryption algorithms (Col 14 lines 50-60 and Col 19 lines 43-53).

14. As per claim 13, Nguyen discloses the cryptography circuit as described in claim 10 wherein said reconfiguration circuit comprises: code means for storing a second set of encryption data; and code means for implementing an encryption algorithm (Col 5 lines 1-10, and Col 20 lines 58-67).
15. As per claim 14, Nguyen discloses a method of allocating resources comprising: allocating a memory with a first set of decryption data corresponding to a first-level-of-encryption; receiving a first data stream having said first-level-of-encryption; re-allocating said memory with a second set of decryption data corresponding to a second-level-of-encryption said second-level-of-encryption being different from said first-level-of-encryption of said first data stream; and receiving a second data stream having said second-level-of-encryption (Fig 11 and 12, Col 11 lines 38-46, and Col 10 lines 7-25).
16. As per claim 15, Nguyen discloses the method as described in claim 14 and further comprising detecting that said second-level-of-encryption of said second data stream is different from said first-level-of-encryption of said first data stream (Col 17 lines 35-48). Since, each data stream have different session keys, the server will automatically know which level of encryption to use.

17. As per claims 16 and 17, Nguyen discloses the method as described in claim 14 wherein said allocating a memory with a first set of decryption data corresponding to said first-level-of-encryption comprises storing decryption key data; said memory with a second set of decryption data corresponding to said second-level-of encryption comprises storing decryption key data. (Fig 11 and 12, Col 11 lines 38-46, and Col 9 lines 42-46).
18. As per claim 18, Nguyen discloses the method as described in claim 14 wherein said first data stream is comprised of a plurality of different services, each service encrypted at the same level of encryption (See abstract).
19. As per claim 19, Nguyen discloses an integrated circuit comprising: of cryptographic data, wherein said processor is operable to implement a plurality of cryptographic algorithms (Col 20 lines 58-67). Nguyen implicitly disclose a different algorithm can be used.
20. As per claim 20, Nguyen discloses the integrated circuit as described in claim 19 wherein said cryptographic algorithms are encryption algorithms (Col 20 lines 58-67).

21. As per claim 21, Nguyen discloses the integrated circuit as described in claim 19 wherein said cryptographic algorithms are decryption algorithms (Col 20 lines 58-67).
22. As per claim 21, Nguyen discloses a set-top box apparatus comprising: an input to receive a data stream (Col 5 lines 1-10); a processor coupled to said input; a memory coupled to said processor configured to store a first set of decryption data (Col 5 lines 1-10); code for use by said processor that allows said processor to reconfigure said memory with a second set of decryption data (Col 5 lines 1-50).
23. As per claim 23, Nguyen discloses a method of providing encrypted data, said method comprising: providing a first set of services; encrypting at least one of said services from said first set of services at a first-level-of-encryption (Col 10 lines 7-15); combining the first set of services into a first data stream (Col 10 lines 7-15); transmitting from a head end to a set-top box said first data stream; storing a first set of decryption keys associated with said first-level-of-encryption in an integrated circuit in said set-top box (Col 10 lines 7-15, and Col 19 lines 35-55), said first set of keys corresponding to the decryption algorithm for the first-level-of-encryption (Col 10 lines 7-15); decrypting said first data stream; providing a second set of services; encrypting at least one of said services from said second set of services with an encryption algorithm

different from said first-level-of-encryption (Col 10 lines 7-15, and Col 20 lines 58-67); combining the second set of services into a second data stream; formatting said second data stream; transmitting from said head end to said set-top box said second data stream; storing a second set of decryption keys associated with said second-level of-encryption in said integrated circuit in said set-top box; storing a plurality of decryption algorithms in said set-top box; and decrypting said second data stream (Col 10 lines 7-15, and Col 20 lines 58-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (US-5638448).

24. As per claim 8, Nguyen discloses the method as described in claim 1. However, he does not specifically refer to the memory as RAM. Nevertheless, Nguyen's invention includes servers and personal computers. Therefore, it is obvious at the time of the invention for one of ordinary skill in the art that the personal computer includes RAM (Col 1 lines 13-19).

25. As per claim 9, Nguyen discloses the method as described in claim 1. However, he does not specifically mention the storing a portion of said first set of encryption data in a register of a microprocessor. It is obvious at the time of the invention for one of ordinary skill in the art that the microprocessor of a computer has multilevel caches and also includes registers (Col 1 lines 13-19).
26. As per claim 11, Nguyen discloses the cryptography circuit as described in claim 10. However, Nguyen does not teach the reconfiguration circuit is triggered by a change in the encryption of said data stream. Nevertheless, it is obvious at the time of the invention for one ordinary skill in the art that a computer has circuitry to do multi-tasks and have multiple connections. A computer microprocessor does trigger the circuit by a change in the encryption of the data stream or connections of a client (Col 12 lines 20-25, Figure 12, and Col 13 lines 10-15).

Conclusion

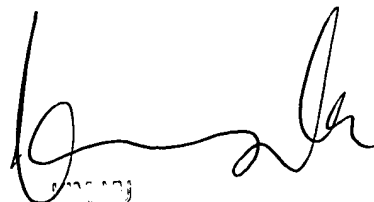
1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2135

2. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (703)-305-8914 or Fax to 703-746-9821.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (703)-305-4393. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703)-305-9600.

Linh LD Son

Patent Examiner



2010.03
SUPERVISORY AND PAT. EXAMINER
TECHNOLOGY CENTER 2135